DESIGN CRITERIA

- D1 ALL WORK SHALL CONFORM TO AT LEAST THE MINIMUM STANDARDS OF THE FLORIDA BUILDING CODE 2014, FIFTH EDITION
- D2 DESIGN LOADS PER FLORIDA BLDG. CODE, SEE PLAN SHEETS FOR FLOOR & ROOF DESIGN LOADS WIND DESIGN PER ASCE 7-10

V=175 MPH (3 SECOND GUST) a=3'-0"

EXPOSURE C \ gh SERVICE=57.2 PSF ENCLOSED BUILDING ~′Kď=0.85

FOUNDATION DESIGN VALUES CERTIFICATION: THIS IS TO CERTIFY THAT THIS OFFICE HAS DETERMINED BY RATIONAL ANALYSIS AND THE SITE IS IN A "DEVELOPED SITE" AREA THAT THE ALLOWABLE IN-PLACE BEARING CAPACITY FOR THE PROPOSED FOOTING IS 2,000 PSF. THE NATURE OF THE EXISTING SOIL IS LIMESTONE. CONTRACTOR TO PROVIDE ENGINEER LETTER CERTIFYING SOIL CAPACITY.

DA TO THE BEST OF THE ENGINEER'S KNOWLEDGE. THE STRUCTURAL PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2015 EDITION

- G1 PREPARATION OF THE STRUCTURAL DOCUMENTS ASSUMES THE GENERAL CONTRACTOR HAS A MINIMUM OF 5 YEARS EXPERIENCE IN SIMILAR TYPE METHOD OF CONSTRUCTION. PRIOR TO START OF CONSTRUCTION, ANY NOTES OR DETAILS THAT ARE NOT FULLY UNDERSTOOD SHALL BE BROUGHT TO THE A/E FIRM IN WRITING FOR CLARIFICATION.
- G2 THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
- G3 THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR
- G4 NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.
- G5 THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANCHORED, EMBEDDED, SUPPORTED ITEMS WHICH AFFECT THE STRUCTURAL DRAWINGS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- ALL SUBMITTALS MUST BE IN ELECTRONIC FORM. SIGNED AND SEALED PAPER SHOP DRAWINGS WILL BE STAMPED BY THIS OFFICE AFTER ALL COMMENTS HAVE BEEN INCORPORATED INTO NO PAPER SHOP DRAWINGS WILL BE REVIEWED BY THIS OFFICE. THE DRAWINGS AND CALCULATIONS.

SLAB ON GRADE

- S1 UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT REFERENCED ABOVE COMPACT INTERIOR FILL TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557). SOIL COMPACTION SHALL BE FIELD CONTROLLED BY REPRESENTATIVE TECHNICIAN OF QUALIFIED LABORATORY EACH LAYER OF FILL SHALL NOT EXCEED 12" THICK AND SHALL BE COMPACTED PRIOR TO PLACEMENT OF NEXT LAYER.
- MINIMUM PLACEMENT OF CONTROL JOINTS SHALL BE AS SET IN THE TABLE BELOW. JOINTS OCCUR IN EACH DIRECTION.

SLAB THK IN.	COLUMN SPACING (FT.)				
	15' OR LESS	15'-1" TO 32'-0"	32-1" TO 48'-0"	48-1" TO 60'-0"	
4"	AT COL. GRID	AT COL. GRID & 1/2 WAY BTWN (2 EQ)	AT COL. GRID & @ 1/3 POINTS (3 EQ.)	AT COL. GRID & @ 1/4 POINTS (4 EQ.)	
5''	AT COL. GRID	AT COL. GRID & 1/2 WAY BTWN (2 EQ)	AT COL. GRID & 1/2 WAY BTWN (2 EQ)	AT COL. GRID & @ 1/3 POINTS (3 EQ.)	
6"	AT COL. GRID	AT COL. GRID & 1/2 WAY BTWN (2 EQ)	AT COL. GRID & 1/2 WAY BTWN (2 EQ)	AT COL. GRID & @ 1/3 POINTS (3 EQ.)	

CONCRETE AND REINFORCING

- C1 CONCRETE WORK SHALL CONFORM TO ACI CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-02)
- C2 ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH & PROPERTIES AS FOLLOWS:

L-1	(TIEO AO I OLLOWO.		SLUMP	MAX. WATER/CN
	FOUNDATIONS SLAB ON GRADE	3000 PSI	6±1"	0.62
	BEAMS	4000 PSI	5±1"	0.58
	FILLED CELLS	3000 PSI	9±1"	0.64
	COLUMNS	5000 PSI	5±1''	0.40

- C3 CONCRETE MIX DESIGN SUBMITTALS MUST INCLUDE THE AREA IN WHICH THE CONCRETE IS TO BE PLACED (e.g. FOUNDATIONS SLAB-ON-GRADE, FILLED CELLS, COLUMNS, etc.). FAILURE TO DO SO WILL CAUSE DELAY AND/OR REJECTION OF SUBMITTALS.
- C4 REBARS SHALL CONFORM TO ASTM-615 GRADE 60. WELDED

UNLESS OTHERWISE NOTED.

WIRE FABRIC SHALL CONFORM TO ASTM A-185. C5 MIMIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS

FOOTINGS	3"
SLABS ON GRADE	1 1/2" FROM TOP
BEAMS	1 1/2" (ON TIES)
COLUMNS	1 1/2" (ON TIES)

- C6 SPLICES AND ANCHORAGE OF REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.
 - WELDED WIRE FABRIC 36 DIA. (12" MIN) ALL OTHER
- C7 REINFORCEMENT IN WALLS, FOOTINGS AND BEAMS SHALL BE CONTINUOUS AND LAPPED AS SHOWN ON NOTE M11. HOOK AND LAP ALL CORNER AND INTERSECTING BARS. (SEE
- TYPICAL DETAILS) C8 TERMINATE ALL DISCONTINUED ELEVATED SLAB TOP BARS WITH A 180 DEGREE STANDARD HOOK UNLESS OTHERWISE
- C9 CONTINUOUS TOP BARS SHALL BE SPLICED AT MIDSPAN.
- CONTINUOUS BOTTOM BARS SHALL BE SPLICED AT CENTER-LINE OF SUPPORTS (OR AS SHOWN ON TYPICAL DETAILS).
- Miami Dade Connty/Pégarintentofretalmyznd Economic Resources Job Copy 0001164365 - 6/20F2/GFASD PROCESS AS FORTING NTAL BARS.

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Examiner Date Time Stamp Disp. Trade Stamp Name Fredy Tain 6/16/2016 4:58:06 PMA STRU Approved

GENERAL STRUCTURAL NOTES

<u>MASONRY</u>

- M1 MASONRY CONSTRUCTION SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES (ACI 530-08/ASCE 5-08/TMS 402-08) SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-08 /ASCE 6-08/TMS 602-08) ASTM C476, ASTM C1019, AND NCMA
- M2 CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90. (f'm = 1500 PSI) (1900 PSI ON THE NET AREA)
- M3 MORTAR SHALL COMPLY WITH ASTM C270, TYPE M OR S. (COMPRESSIVE STRENGTH = 2500 PSI AND 1800 PSI, RESPECTIVELY. SITE TESTED MORTAR CUBES SHALL ACHIEVE A MINIMUM OF 80% OF THE DESIGN COMPRESSIVE STRENGTH)
- M4 BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.
- M5 ALL MASONRY CROSS WEBS SHALL BE FULLY BEDDED IN MORTAR AROUND CELLS TO BE GROUTED.
- THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST BE NOT LESS THAN 2"x3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS. MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
- REINFORCE WALLS WITH LADDER TYPE (ASTM A-82, #9 GAGE WIRE) REINFORCEMENT EQUAL TO DURO-WALL IN BED JOINTS AT 16" OC UNO, MEASURED VERTICALLY PLACE PER MFR INSTR. LAP ALL HORIZONTAL JOINT REINFORCING 8", MIN.
- WHERE SHOWN, CELLS OF BLOCK MASONRY SHALL BE FILLED WITH GROUT WITH MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, AND MEET ASTM C476. GROUT SHALL BE PROVIDED BY CONCRETE SUPPLIER FROM THEIR BATCH PLANT WITH A SLUMP OF 8" TO 10". JOB SITE MIXING OF GROUT SHALL NOT BE PERMITTED. TESTING SHALL CONFORM TO ASTM C1019.
- GROUT FOR FILLED CELLS SHALL BE POURED OR PUMPED IN LIFTS NOT TO EXCEED EIGHT (8) FEET IN HEIGHT, AND SHALL BE CONSOLIDATED AT TIME OF POURING BY RODDING OR VIBRATING.
- M10 PROVIDE KNOCK-OUT CMU AT BASE OF EACH FILLED CELL TO ALLOW VISUAL VERIFICATION OF COMPLETE GROUT PENETRATION (FOR LIFTS OF 5'-0" OR LESS, A KNOCK-OUT AT BASE OF LIFT WILL NOT BE REQUIRED).
- VERTICAL REINFORCING MUST HAVE A MINIMUM CLEARANCE OF 1/2" TO INSIDE FACE. MIN VERTICAL BAR LAP = 40 x BAR DIAMETER. VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND LATERALLY SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 192 x BAR DIAMETER NOR 10 FT.
- GROUT PLACEMENT STOPPED FOR (1) HOUR OR MORE SHOULD BE STOPPED (1 1/2") BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
- M13 SEE FOUNDATION PLANS FOR ALL VERT REINFORCING. TYP VERTICAL REINFORCING SIZE & SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.
- TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- M15 MASONRY CONSTRUCTION MATERIALS AND INSPECTIONS SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI-ASCE 530.1)" EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE DOCUMENTS.
- M16 MAXIMUM CONTROL JOINT SPACING FOR CONC MASONRY UNITS.

SPACING FOR CONTROL JOINTS 3 x WALL HEIGHT = SPACING IN FT

M17 PROVIDE FILLED PRECAST U-LINTELS WITH (1) #5 CONT AT ALL OPENINGS WHERE CONCRETE BEAMS ARE NOT SHOWN OR NOTED. MINIMUM UNFILLED LINTEL CAPACITY = 400 lb/LF FOR SPAN INDICATED.

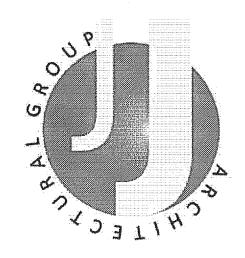
(NOT TO EXCEED 50'-0")

- M18 STOPPING AND RESUMING WORK: RACK BACK 1/2-UNIT LENGTH IN EACH COURSE. DO NOT TOOTH. CLEAN EXPOSED SURFACES OF SET MASONRY WET UNITS LIGHTLY (IF REQ'D) AND REMOVE LOOSE MAS UNITS AND MORTAR PRIOR TO LAYING FRESH MASONRY.
- M19 REINFORCE MASONRY OPENINGS GREATER THAN 1'-0" WIDE, WITH HORIZ JT REINF PLACED IN (2) HORIZ JT'S APPROXIMATELY 8" APART. IMMEDIATELY ABOVE THE LINTEL AND IMMEDIATELY BELOW THE SILL. EXTEND REINFORCING A MINIMUM OF 2'-0" BEYOND JAMBS OF THE OPENING EXCEPT AT CONTROL JOINTS. SEE PLAN FOR ADDITIONAL REQUIREMENTS.
- M20 DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS.
- M21 DO NOT APPLY CONCENTRATED LOADS TO MASONRY WALLS FOR (7) DAYS.
- M22 EXTEND ALL VERTICAL WALL REINFORCEMENT TO WITHIN 2" OF TOP OF WALL OR BEAM UNLESS NOTED OTHERWISE. TERMINATE REIN-FORCING WITH STANDARD ACI HOOK.

STRUCTURAL STEEL

- GENERAL CONTRACTOR SHALL ENGAGE A CERTIFIED TESTING AGENCY TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.
- STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATIONS" FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS", LATEST EDITION.
- S3 STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE B.
- STRUCTURAL WF SHAPES SHALL BE TO ASTM A572 Fy=50KSI, UNLESS NOTED OTHERWISE. ALL OTHER SHAPES SHALL BE A36. ALL STRUCTURAL STEEL SHALL BE DOMESTICALLY PRODUCED.
- BRACE AND MAINTAIN ALL STEEL IN ALIGNMENT UNTIL OTHER PARTS OF CONSTRUCTION NECESSARY FOR PERMANENT SUPPORT ARE COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING TEMPORARY SHORING AS REQUIRED FOR THE STABILITY OF THE STEEL FRAME UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN COMPLETED AND BUILDING IS ENCLOSED.
- ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF "THE STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION" OF THE AMERICAN WELDING SOCIETY. WELDING ELECTRODES SHALL BE E70XX-LOW HYDROGEN FOR SHIELD AND METAL ARC
- S7 GROUT FOR COLUMN BASE PLATES AND PRESET BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT. (5000 PSI MIN)
- SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOADS AND
- S9 ALL WELDED CONN. SHALL BE 1/4" FILLET ALL AROUND, UNO. ALL BOLTED CONN. SHALL BE 3/4"_ A325 BOLTS, UNO.
- S10 STEEL PAN STAIRS SHALL BE DESIGNED BY THE FABRICATOR AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE SAME STATE AS PROJECT LOCATION. DESIGN FOR 100 PSF LIVE LOAD.
- S11 ALL STEEL EXPOSED TO WEATHER SHALL HAVE ZINC RICH PRIMER

- ALL WOOD MEMBERS TO BE SOUTHERN PINE NO.2 GRADE OR BETTER U.N.O. ON PLAN
- ALL WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED



JJ ARCHITECTURAL GROUP 3500 NW BOCA RATON BLVD SUITE 624 BOCA RATON - FLORIDA - 33431 P-561.288.3956 F-561.288.3959

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STRUCTURAL NOTES

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Project number	DADON RESIDENCE
Date	10.12.2015
Drawn by	Author
Checked by	Checker

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